

REMARKS/ARGUMENTS

The Pending Claims

Claims 1, 2, and 6-10 are pending and are directed to a method of growing spermatogonial stem cells.

The Amendments to the Claims

Claim 1 has been amended to recite that the spermatogonial stem cells are cultured using feeder cells, as previously recited in claim 4 (now canceled), and a medium containing serum, as previously recited in claim 3 (now canceled). Additionally, claim 1 has been amended to no longer recite "artemin," and claim 11 has been canceled.

In view of the cancelation of claim 3, claim 10 has been amended to depend from claim 1. The claims also have been amended to further clarify the subject matter of the claims and to place the claims in a manner more consistent with U.S. patent practice.

No new matter has been added by way of these amendments.

Summary of the Office Action

The Office maintains the rejection of claims 1-4 and 6-11 under 35 U.S.C. § 112, first paragraph, as allegedly lacking enablement.

Reconsideration of this rejection is hereby requested.

Examiner Interview

Applicants thank Examiner Ton for the courtesies extended to Applicants' representative Rachel Mejdrich during the telephone interview of August 2009. The remarks set forth herein reflect the discussion during the Examiner interview.

Discussion of the Enablement Rejection

The Office contends that the inventive methods are not enabled by the specification.

In particular, the Office contends that the specification is not enabling for the use of artemin. The Office acknowledges that the specification is enabling for the use of GDNF or neurturin in the medium (see page 3 of the Office Action). In an effort to advance prosecution, Applicants have amended claim 1 to recite that the medium contains GDNF or neurturin.

The Office further contends that the specification is not enabling for methods involving the use of a medium containing only GDNF and LIF without any growth factors or serum. The Office acknowledges the teachings in the “Declaration under 37 C.F.R. § 1.132 of Takashi Shinohara” dated February 27, 2009, that the addition of growth factors, such as EGF and bFGF, is not necessary to achieve the growth of the spermatogonial stem cells; however, the Office points out that the “F/SP medium” used in Experiment 2 is not described such that it is clear that no growth factors are present in the “F/SP medium.”

Applicants herewith submit a “Corrected Declaration under 37 C.F.R. § 1.132 of Takashi Shinohara” that recites that the medium used in Experiment 2 is the same “F/S medium” as used in Experiment 1. The recitation of “F/SP medium” in the previously submitted “Declaration under 37 C.F.R. § 1.132 of Takashi Shinohara” was a typographical error. The experiments set forth in the corrected Rule 132 declaration demonstrate that spermatogonial stem cells can grow in a medium containing GDNF and LIF without any other growth factors at a level similar to that achieved using a medium containing GDNF, LIF, EGF, and bFGF (see page 4, second paragraph, and page 5, first paragraph, of the corrected Rule 132 declaration).


Furthermore, Applicants have amended the claims to recite that the spermatogonial stem cells are cultured on feeder cells and in a medium containing serum.

In view of the foregoing, Applicants believe that the specification is enabling for the inventive methods as defined by the pending claims and request that the enablement rejection be withdrawn.

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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